

A new *Neomyobia* species (Acarina: Myobiidae) from a South African bat

by

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Neomyobia africanoides spec. nov. figs. 1-3

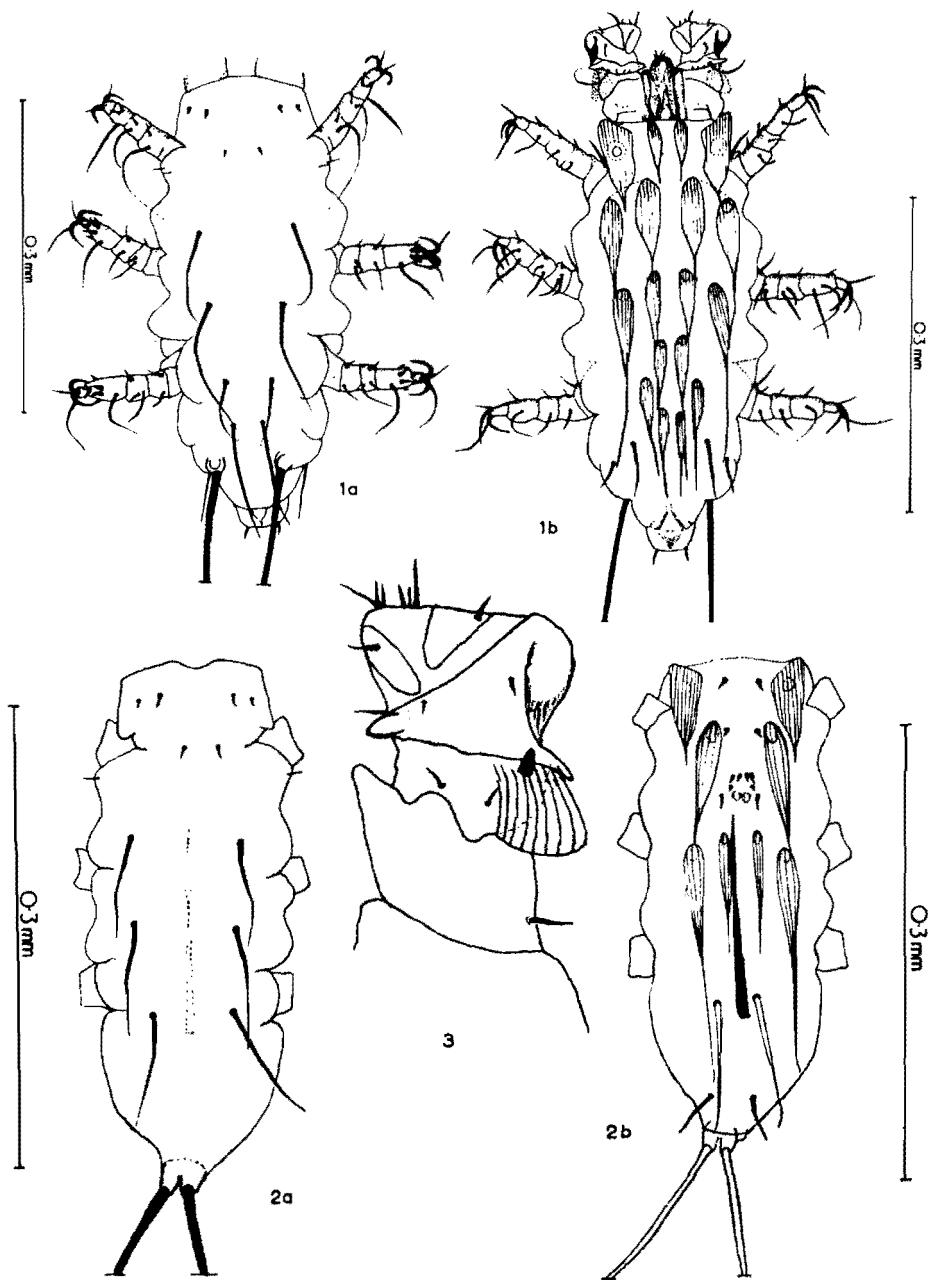
This new mite, discovered on the Peak-saddle Horseshoe Bat (*Rhinolophus blasii* Peters), is very similar to *Neomyobia africana* Lawrence (1951), but differs from it in the female by lacking the pair of pores on the hind part of the venter, by slight differences in the length of several dorsal spines and setae, and in the male mainly by the shape of the penis.

FEMALE (fig. 1): Ventrally there are five pairs of small setae on the anterior half of the body, the first two pairs anterior to leg II, the third pair at the same level as coxa II and median. The fourth pair of setae is placed posterior and laterally to coxa II. The remaining ventral surface shows four long and slender pairs of setae, the first one being situated anteriorly to leg III, and extending beyond the second pair, which originates about halfway between legs III and IV. The second pair of setae is the longest and reaches to the base of the fourth pair. The third pair, originating level with leg IV is the shortest. The last pair, slightly thicker than the rest, reaches well towards the posterior margin of the body. The short pair of setae adjacent to the first pair of long setae in *N. africana* is not present in *N. africanoides*, and the pore-like opening between the third and fourth pair of long setae is also lacking. Dorsally, of the series of four spines anterior to leg II, the two outer spines are broad and scale-like, with two smaller inner spines. Posterior to leg II is the second series of four spines, of which the inner and outer pairs are connected by a faint line on either side. The third series of four spines appears in the region of leg III. The median ones are slightly anterior, level with leg III, and slightly smaller than the lateral ones, which extend beyond the base of both pairs of posterior setae. A pair of median

EXPLANATIONS OF FIGURES

Figs. 1-3. *Neomyobia africanoides* spec. nov.

1a: Ventral view of female; 1b: Dorsal view of female; 2a: Ventral view of male;
2b: Dorsal view of male; 3: Ventral view of leg I.



spines is present at a level halfway between legs III and IV, flanked by two spines of the same size inserted halfway down their own length. The last pair of median spines is situated level with the posterior edge of coxa IV, and more or less reaches the pore of the flagella. Two pairs of setae diverge from the last pair of lateral spines, and at the extreme tip of the abdomen is a pair of small setae. The third pair of setae present at the edge of the abdomen in *N. africana* is lacking in *N. africanoides*.

Legs I-IV consist of five segments. Leg I (fig. 3) is very much enlarged; its appearance is like that of *N. africana*, with the last segment triangular in shape, and beset with hair at the distal end. The penultimate segment shows a strong tooth-like process on its ventral side. Segment III is covered laterally by a lamina with a very blunt spine originating at its base. The long strong dorsal seta of segment III in *N. africana* is much thinner and shorter in *N. africanoides*.

The tarsal claws of legs III and IV are uniform, those of leg II smaller. Legs II-IV each with one long and one short tarsal seta. On the ventral surface of leg II there are relatively long posterolateral setae on segments II, III, and IV, those of II longest, of III shortest. Dorsally on leg II of segments II, III and IV, there are long setae, quite thick at their base, tapering strongly to the tip, the longest on segment IV, the shortest on segment III. Similar setae can be seen on leg III dorsally on segments III and IV, those on leg IV as on leg II. Long posterolateral setae as on leg II are found on legs III and IV, the longest on segment IV and the shortest on segment II. Legs III and IV show the same outstanding circlets of four spurs as in *N. africana*, ventrally and anterolaterally on segment IV, and two shorter ones on segment V. Segment III of legs III and IV has a lateral spine resembling those of segment IV.

Body length including palpi, 519μ ; width measured at widest point between legs III and IV, $198\cdot204\mu$.

MALE (fig. 2): The anterior part of the body is beset ventrally with small setae as in the female. The first pair of long setae originates level with the tip of the penis, the second pair halfway between legs III and IV, and the third pair at the posterior edge of coxa IV. The first pair is the shortest, the second and third pairs equal in length. The setae are slightly longer than in *N. africana*.

The claws of legs III and IV are apparently smaller than in the female, otherwise the legs of male and female are the same.

Dorsally the anterolateral scale-like spines resemble those of the female. Level with the widest part of those scales is one pair of small median spinules. A second median pair is adjacent to the base of the next lateral pair of spines. The third series of spines is situated in the region of leg III; the tips of the two lateral ones extend nearly to the base of the last pair of dorsal setae. The median pair of the third series is very much narrower and shorter than these, and is situated in a slightly anterior position. The penultimate pair of setae is not striated and not expanded and reaches to

the posterior end of the body. The last pair of setae reach to the pore of the flagella. The striking difference between *N. africana* and *N. africanoides* is that in *N. africana* the penis is bent and in *N. africanoides* it is straight, starting beneath the penultimate pair of unstriated setae and reaching nearly to the genital opening. The genital opening is beset only anteriorly with six spinules arranged symmetrically and two bigger basal setae in *N. africanoides*, whilst in *N. africana* there are 10 or 12 minute spines arranged asymmetrically around the genital opening.

Body length including palpi, 420 μ ; width measured at widest point between legs III and IV, 135 μ .

LOCALITY: ♀-Holotype, one ♂- and one ♀-paratype, Rooiberg (Tvl.), 27.VII.1962 (F. Zumpt), from the Peak-saddle Horseshoe Bat (*Rhinolophus blasii* Peters); all types in the collection of the South African Institute for Medical Research, Johannesburg.

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